

Purchase Order Receipt Listing

Monday, June 27, 2016 1:39:26 PM

All amounts are calculated in domestic currency.

All Vendors PO ID PO32748 Receipt Dates from 6/24/2016 to 6/24/2016 All Line Item Types
All Item ID/GL/WOs All Rec. Employees All Currencies
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Rev Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor ID/Vendor Name											
PO32748	1		VU-TW/M001 TW Metals								
USD	No		M304TR0.750W.049 f		6/27/2016	6/24/2016	40.0000	746 X .047	0.0000	0	\$0.00
			304 RD Tube .750 x .049W		40.0000	PLOU01			0.0000	0	
			m135093				38	750 X .048			
	2		M4130NT0.750W.04 f		6/27/2016	6/24/2016	40.0000		0.0000	0	\$0.00
	No		4130 RD Tube .750 x .049W		40.0000	PLOU01			0.0000	0	
			m135093				23	1.00 X .118			
	3		M4130NT1.000W.12 f		6/27/2016	6/24/2016	23.0000		0.0000	0	\$0.00
	No		4130 RD Tube 1.00 x f .120wall		20.0000	PLOU01			0.0000	0	
			m135093				60	312 X .053			
	4		M6061T6T0.3125W.0 f		6/27/2016	6/24/2016	60.0000		0.0000	0	\$0.00
	No		ALUM TUBE .3125 x .058W		60.0000	PLOU01			0.0000	0	
			m135093				48	500 X .054			
	5		M6061T6T0.500W.05 f		6/27/2016	6/24/2016	48.0000		0.0000	0	\$0.00
	No		6061-T6 RD Tube .500 x .058W		40.0000	PLOU01			0.0000	0	
			m135093				48	625 X .062			
	6		M6061T6T0.625W.06 f		6/27/2016	6/24/2016	48.0000		0.0000	0	\$0.00
	No		6061-T6 RD Tube .625 x .065W		40.0000	PLOU01			0.0000	0	
			m135093				1.0000		0.0000	0	\$0.00
	7		71401-45		6/27/2016	6/24/2016			0.0000	0	\$0.00
	No		procurement quality clauses		1.0000	PLOU01			0.0000	0	
			m135093								

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
<div> <div>Total Received Quantity:</div> <div>Total Qty to Inspect (PO U/M):</div> <div>Total Reject Quantity:</div> <div>Total Receipt Value:</div> <div>Total Balance Due Quantity:</div> </div>											260.0000 0.0000 0.0000 \$0.00 0.0000



O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 80789184

FROM: CHIC

PAGE 1

CUST NUMBER: 1203820 NET WGT: 68.797 REQ.DATE: 06/23/16 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 06/20/16
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: PO32748 RELEASE NO.:
RECEIVING PHONE:

LINE	ITEM DESCRIPTION	WIDTH	LENGTH
0001	36860 SMLS CD 304/L A269 3/4 OD X .049 WA	20' CL	

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	40.000 FT	40.000 FT	40.000 FT	14.669	2

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: 2B999.g Export License: NLR Expiration Date: 0/00/00
PO:49336431 HT:YX1501783 PC: 2 CUSTOMER QTY: UOM
MLT:CHINA MFG:CHINA SLB/CL:-

0002	33047 CDS 4130 6736	3/4 X .049	17/24 FT
------	---------------------	------------	----------

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	40.000 FT	38.000 FT	38.000 FT	13.935	2

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: 9A991.d Export License: NLR Expiration Date: 0/00/00
PO:49340779 HT:74097981 PC: 2 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:134860

0003	33364 SMLS CD 4130 RD 6736	1 X .120	17/24 FT
------	----------------------------	----------	----------

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	20.000 FT	23.000 FT	23.000 FT	25.944	1

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: 9A991.d Export License: NLR Expiration Date: 0/00/00
PO:49343812 HT:A160158 PC: 1 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:136721

Spille-b-27

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE
PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL
REVIEW.
<http://www.twmetals.com/invoice-terms.html>



O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 80789184

FROM: CHIC

PAGE 2

CUST NUMBER: 1203820 NET WGT: 68.797 REQ.DATE: 06/23/16 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 06/20/16
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: PO32748 RELEASE NO.:
RECEIVING PHONE:

LINE ITEM DESCRIPTION WIDTH LENGTH
0004 41723 D6061-T6 5/16 OD X .058 WA 12 FT ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	60.000 FT	60.000 FT	60.000 FT	3.276	5

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49342887 HT:35420776 PC: 5 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:35420776

0005 42276 D6061-T6 1/2 OD X .058 WA 12 FT ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	48.000 FT	48.000 FT	48.000 FT	4.545	4

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49342317 HT:35361464 PC: 4 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:324203

0006 42558 D6061-T6 5/8 OD X .065 WA 12 FT ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	48.000 FT	48.000 FT	48.000 FT	6.428	4

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49347943 HT:F002127610001 PC: 4 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:220181

Sp/6-27

THANK YOU FOR THIS ORDER

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O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 80789184 FROM: CHIC PAGE 3

CUST NUMBER: 1203820 NET WGT: 68.797 REQ.DATE: 06/23/16 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKSBURY ON HAWKSBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 06/20/16
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: PO32748 RELEASE NO.:
RECEIVING PHONE:

LINE ITEM DESCRIPTION WIDTH LENGTH
BROKERS KUEHNE AND NAGEL LTD

		PACK INFO				
AREA	TYPE OF PKG	PKGS	GRS WEIGHT	WIDTH	LENGTH	HGHT
YRC	CARTON	1.000	21.000	2.0000	246.0000	2
YRC	CARTON	1.000	49.000	3.0000	2863.0000	
YRC	CARTON	1.000	22.000	4.0000	150.0000	4
		3.000	92.000			

BY: CL
RT 000-

UNLOAD TYPE: NONE SPECIFIED

SP 16-6-27

DATE SHIPPED _____

DATE FILLED _____

THANK YOU FOR THIS ORDER

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PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL
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O'Neal High-Performance Metals Group



**Packing
Slip**

ORDER NO.: 80789184 FROM: CHIC PAGE 4

CUST NUMBER: 1203820	NET WGT: 68.797	REQ.DATE: 06/23/16	CONFIRMED
SOLD TO:	SHIP TO:		
DART AEROSPACE LTD	DART AEROSPACE LTD		
1270 ABERDEEN ST	1270 ABERDEEN ST		
HAWKESBURY ON	HAWKESBURY ON		
CANADA	CN K6A 1K7	ONTARIO CANADA	CN K6A 1K7

SALESPERSON:	DONNA SMALLEY	SHIP BY:	06/20/16
TERMS:	NET 30 DAYS	235 TUBEWAY	
F.O.B.:	SHIPPING POINT	CAROL STREAM	IL 60188
CUST ORD NO.:	PO32748		
VIA:	COMMON CARRIER		
FREIGHT:	PREPAID		
RELEASE NO.:			
RECEIVING PHONE:			

"TW Metals MSDS data is available on our web site at www.twmetals.com. MSDS data can be found under the Technical Resources Tab, Product Statistics & Data and the TW Metals MSDS's heading. If you do not have web site access you may telephone 610-458-1300 and we will mail or fax a copy of our current MSDS data to your location."

"CERTIFICATE OF CONFORMANCE"

"TW Metals certifies that the material supplied on this purchase order and contained in the heat/lot number referenced above has been manufactured, inspected, and tested in accordance with the material specification. These records are on file at TW Metals. Packaging material for shipments to Europe and China consists of manufactured wood products and complies with the European emergency measures for coniferous non-manufactured wood packing material"

Authorized Test Report Clerk Cynthia Simon Date: 6/20/16

These commodities have been exported from the United States in accordance with the U.S. export control laws, export administrations regulations. Diversion contrary to U.S. law prohibited.

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL REVIEW.
<http://www.twmetals.com/invoice-terms.html>



PRECISION TUBE CO.
287 WISSAHICKON AVE.
NORTH WALES PA 19454

Control No: 171317

CERTIFIED TEST REPORT

CUSTOMER PURCHASE ORDER NO.	CUST. ORD. NO.	PRECISION TUBE P/N
49342317 LINE 001	324203	24A050000580003

SOLD: TW METALS
TO 235 TUBEWAY
CAROL STREAM, IL 60188
UNITED STATES

SHIP: TW METALS
TO 235 TUBEWAY
CAROL STREAM, IL 60188
UNITED STATES

QUANTITY ORD.	DESCRIPTION	QTY. SHIPPED	DATE SHIPPED
3336 FT	METAL - 6061 ALUM TEMPER - T6 SPEC - AMS 4082P WW-T-700/6F AM 2 AMS-WW-T-700/6B ASTM-B-210-12 LENGTH - 12 FT LGTH TOL +.1250 IN -.0000 IN SHAPE - ROUND FINISH - STRAIGHT EXACT LENGTHS OD .5000 +.0030 -.0030 ID WALL .0580 +.0040 -.0040	3528 FT	01/20/16

TW METALS
TEST
JAN 22 16
ACCEPTED BY

MECHANICAL PROPERTIES

SAMPLE #	TENSILE STRENGTH (P.S.I.)	YIELD STRENGTH (P.S.I.)	ELONGATION IN 2 INCHES (%)	ROCKWELL HARDNESS	AVERAGE GRAIN SIZE (MM.)
1	45,602	41,239	17		

DESTRUCTIVE TESTS

Comments: FAR BAA COMPLIES, DFARS BAA COMPLIES, FAR TAA COMPLIES

NON-DESTRUCTIVE TESTS

EDDY CURRENT: PASS

CHEMICAL COMPOSITION

ALLOY: 6061 HEAT: TRACEABILITY #: 35361464
RAW MATL VENDOR: PT56438 - Kaiser Aluminum

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al
Min	0.40		0.15		0.80	0.04			Rem.
Max	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	

OTHER ELEMENTS: 0.05 MAX EACH / 0.15 MAX TOTAL

We hereby certify that the material has been manufactured and tested in accordance with the requirements of the applicable specifications and descriptions set forth on Precision Tube's sales acknowledgement. During the manufacturing, testing, and inspection, the product did not come into direct contact with mercury or any of its compounds, nor with any mercury containing device employing a single boundary containment. Test results indicate that the material is compliant with the current revision of the RoHS Directive (2011/65/EU).

Manufactured in the USA
QMS Registered to ISO 9001: 2008

By:

Art Onalls
Art Onalls
QA Manager

01/20/16

Page: 1 of 1

JB

KAISER ALUMINUM

FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

CUSTOMER PO NUMBER: PT56438		CUSTOMER PART NUMBER: SPIRIT-371850		PRODUCT DESCRIPTION: 5.400 LB/PC .500 LB/-0 LB 1.312 OD X .085 WALL ESRT	
KAISER ORDER NUMBER: 319575	LINE ITEM: 001	SHIP DATE: 12/11/2015	KAISER LOT NUMBER: 50751-312	ALLOY: 6061	TEMPER: O
WEIGHT SHIPPED: 4046.000 LB	QUANTITY: 728.000 PCS	B/L NUMBER: 004904	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 13.984 FT
SHIP TO: PRECISION TUBE CO 287 WISSAHICKON AVENUE N. WALES, PA 19454 USA			SOLD TO: MUELLER INDUSTRIES, INC PRECISION TUBE 8285 TOURNAMENT DRIVE STE. 150 MEMPHIS, TN 38125 USA		



Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	%Elong in 2	HARDNESS	CONDUCT.	BEND
50751-312	0001	0002	18.0	5.6	28.5	NA N/A	N/A	N/A
50751-312	0001	0003	18.4	5.3	28.0	NA N/A	N/A	N/A
50751-312	0001	0004	18.4	5.7	27.6	NA N/A	N/A	N/A
50751-312	0001	0005	17.7	5.1	27.2	NA N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

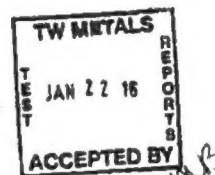
LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	.0
F75382	.58	.35	.22	.05	.98	.09	.06	.03	.00	.00	.00	.01	.02
F82351	.61	.30	.26	.05	1.03	.08	.05	.02	.00	.00	.00	.01	.02

Applicable Requirements:

ASTM-B241-12 NON-STENCILED ASTM-B221-13 ASTM-B345-11 AMS-QQ-A-200/8 97(R07) TYPE I
UNS#A96061 Also conforms to EN 10204 3.1

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY
OF ITS COMPOUNDS ARE UTILITZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.



Plant Serial: 00013235
Kaiser Order Number: 319575
Line Item: 001

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

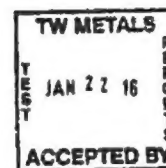
KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

JOSEPH AMES, QUALITY MANAGER

Jph



Plant Serial: 00013235

Kaiser Order Number: 319575

Line Item: 001



PLYMOUTH TUBE CO. USA

1209 East 12th Street, Streator, Illinois 61364

Phone: (815) 673-1515 Fax: (815) 672-7343

TRUST YOUR SOURCE! ACCEPT NO SUBSTITUTIONS!



PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

134860 - 1 / 0

SHIP TO

TW Metals
235 Tubeway Drive
Carol Stream, IL 60188
USA

WORK ORDER 021964
HEAT NUMBER 74097981
MELT SOURCE Gerdau MacSteel - USA Mfg/Melt

**ISO 9001, 14001
AND
TS 16949**

CERTIFIED

CUSTOMER P.O. M 49340779	CUSTOMER PART 33047	QUANTITY	LADING NO	CERT ID / REV	CERT DATE								
PART DESCRIPTION H07500490J000Z OD: 0.7500" Max: 0.7550" Min: 0.7450" ID: 0.6520" Max: 0.0000" Min: 0.0000" Wall: 0.0490" Max: 0.0540" Min: 0.0440" Lgth Type: Random Length: 17.00' /24.00' Spec: Mil-T 6736B Seamless Aircraft Grade: 4130 Finish: Cond N													
CERTIFICATION REQUIREMENTS FAR BAA (FAR 52.225-1 Buy America Act Supplies). DFARS 252.225-7001 By America Act & Bal. of Payments Program FAR TAA (FAR 52.225-5 Trade Agreements)(Paragraph 1,3,4,5)This material was Eddy Current tested and conforms to the requirements of ASTM A-450. The Grain size is determined and reported by the raw material supplier in accordance to ASTM E-112. This raw material was magnetic particle inspected by the raw material supplier in accordance to AMS 2640J and/or ASTM E-1444, and rated as Frequency, and Severity to AMS 2301, latest revision. Yield is determined by using the 0.2% offset method. Material certified to MIL-T 6736B, AMS-T 6736 B AND AMS 6360 M.													
Chemical Analysis													
C	Mn	P	S	Si	Al	Cr	Mo	Ni	Pb	Cu	V	Ti	Sn
.28	.56	.006	.009	.22	.021	.99	.20	.13	-----	.14	.003	-----	.008
Physical Properties													
Freq.	Severity	Grain Size											
0.000	0.000	8											
Mechanical Properties													
TEST	UNITS	#TESTS	HIGH	LOW	AVERAGE	STD-DEV							
Tensile	Psi	6	117870	113670	116292	1417							
Yield	Psi	6	110060	105840	108493	1447							
Elongation	%	6	20	20	20	0							
Rockwell B	Rb		-----	-----	-----								
Rockwell C	Rc	6	21	21	21	0							
TEST	RESULT												
Decarb/OD	Pass												
Total ID/OD decarb	Pass												

This test report data is for the heat Chemistry Stated above.

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

Janice Derossuff
Quality Assurance



PLYMOUTH TUBE CO. USA

1209 East 12th Street, Streator, Illinois 61364

Phone: (815) 673-1515 Fax: (815) 672-7343

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PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

134860 - 1 / 0

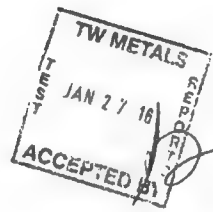
SHIP TO

TW Metals
235 Tubeway Drive
Carol Stream, IL 60188
USA


WORK ORDER 021964
HEAT NUMBER 74097981
MELT SOURCE Gerdau MacSteel - USA Mfg/Melt

**ISO 9001, 14001
AND
TS 16949**

CERTIFIED

CUSTOMER P.O.	CUSTOMER PART	QUANTITY	LADING NO	CERT ID / REV	CERT DATE
M 49340779	33047				
PART DESCRIPTION H07500490J000Z					
<p>The material in this test report is:</p> <ol style="list-style-type: none">1) Drawn in the USA2) Free from Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE), and Mercury contamination.3) NAFTA compliant. <p>End of Certification</p>					
					

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.


Quality Assurance

MILL TEST REPORT

Purchaser.: TW METALS-Carol Stream				Certificate No.: 16-1-48					
Contract No.: TWM P.O.No.: M49336431				Date of Issue.: 2016.1.5					
Commodity: Stainless Steel Seamless Tubes		Specifications: ASTM A213-15c/ASME SA213-15/ASTM A269-15a EAW							
Process: Cold Drawn				Delivery Condition: OD Polished to 240 Grit					
Steel Grade	Heat Number	Lot Number	Dimensions		Quantity				
					Pieces	Feet			
TP304/TP304L	YX1501-783	11-45	3/4" x 0.049" x 20'		200	4,000			
Chemical Composition by Weight (%)									
Element	C	Mn	P	S	Si	Cr	Ni	Mo	Co
Requirements	≤0.035	≤2.00	≤0.045	≤0.030	≤1.00	18.00-20.00	8.00-12.00	-	-
Ladle Analysis	0.012	0.68	0.031	0.001	0.37	18.35	8.05	-	-
Product Analysis	0.019	0.70	0.033	0.002	0.39	18.37	8.31	-	-
Mechanical Properties									
Test Item	Elongation (% in 2")		Tensile Strength (PSI) Rm			Yield Strength (PSI) Rp / 0.2%			
Requirements	≥35		≥75,000			≥30,000			
Test Results	63/64		96,000/97,000			36,000/37,000			
Test Item	Reduction of Area Z (%)		Hardness	Cold Bend Test	Flaring Test	Flattening Test	Flange Test	P.M.I. Test	
Requirements	-		HRB≤80	-	22%	e=0.09	-	-	
Test Results	-		76/78	-	Passed	Passed	-	OK	
Test Item	Eddy Current Test	Air Underwater Pressure Test	Ultrasonic Test	Intergranular Corrosion Test	Macroscopic Inspection				
Requirements	ASTM E 426	-	-	ASTM A262 E	End Cut	Appearance			
Test Results	Passed	-	-	OK	OK	OK			

ISO 9001:2008 Certified by Intertek 110703068

PED Certified by SZUTEST 2195-PED-1526002

Additional Remarks:

- (1) All tubes annealed to above 1900 Deg F and water quenched below 800 Deg F in 3 minutes
- (2) All tubes tested per ASTM A1016-14
- (3) Materials is NACE MR0103-2007 compliant (per Section 2.5)
- (4) Materials is NACE MR0175/ISO 15156-2003 compliant (per Section 4.2.1)
- (5) In Compliance with EN 10204-3.1
- (6) In Compliance with RoHS Stipulation
- (7) No weld repair performed
- (8) Free from mercury contamination
- (9) Free from radioactive contamination
- (10) Billets melt and pipes/tubes manufactured in China
- (11) All tubes 100% PMI tested
- (12) All tubes 100% Eddy Current tested

**CANNOT CERTIFY COMPLIANCE
FAR BAA / DFARS BAA / FAR TAA**

By:



James Shi

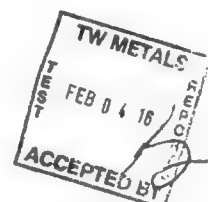
James Shi / Manager

Quality Control Department

We hereby certify that this report is true and correct.

Shanghai Pufa Stainless Steel Pipe Factory

No. 59, Shuangye Road, Wanggang, New Pudong District, Shanghai, China





PLYMOUTH TUBE CO. USA

1209 East 12th Street, Streator, Illinois 61364

Phone: (815) 673-1515 Fax: (815) 672-7343

TRUST YOUR SOURCE! ACCEPT NO SUBSTITUTIONS!



PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

136721 - 1 / 3

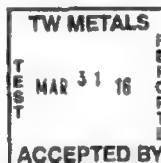
SHIP TO

TW Metals
235 Tubeway Drive
Carol Stream, IL 60188
USA

WORK ORDER 022125

HEAT NUMBER A160158

MELT SOURCE Steel Dynamics - USA Melt/Mfg



ISO 9001, 14001
AND
TS 16949

CERTIFIED

CUSTOMER P.O. M 49343812	CUSTOMER PART 33364	QUANTITY 2,057.0	LADING NO ft 00085022	CERT ID / REV 02	CERT DATE 03/30/2016								
PART DESCRIPTION H10001200J000Z OD: 1.0000" Max: 1.0050" Min: 0.9950" Wall: 0.1200" Max: 0.1320" Min: 0.1080" Length: 17.00' /24.00' Spec: Mil-T 6736B Seamless Aircraft Grade: 4130 Finish: Cond N													
CERTIFICATION REQUIREMENTS FAR BAA (FAR 52.225-1 Buy America Act Supplies), DFARS 252.225-7001 By America Act & Bal. of Payments Program FAR TAA (FAR 52.225-5 Trade Agreements)(Paragraph 1,3,4,5)This material was Eddy Current tested and conforms to the requirements of ASTM A-450.The Grain size is determined and reported by the raw material supplier in accordance to ASTM E-112. This raw material was magnetic particle inspected by the raw material supplier in accordance to AMS 2640J and/or ASTM E-1444, and rated as Frequency, and Severity to AMS 2301, latest revision. Yield is determined by using the 0.2% offset method.Material certified to MIL-T 6736B, AMS-T 6736 B AND AMS 6360 M.													
Chemical Analysis													
C	Mn	P	S	Si	Al	Cr	Mo	Ni	Pb	Cu	V	Ti	Sn
.30	.55	.008	.004	.27	.031	1.04	.23	.13	.000	.13	.002	.001	.006
Physical Properties													
Freq.	Severity	Grain Size											
.000	.000	7											
Mechanical Properties													
TEST	UNITS	#TESTS	HIGH	LOW	AVERAGE	STD-DEV							
Tensile	Psi	2	112510	112090	112300	297							
Yield	Psi	2	105440	105080	105260	255							
Elongation	%	2	22	22	22	0							
Rockwell B	Rb												
Rockwell C	Rc	2	23	23	23	0							
TEST	RESULT												
Decarb/OD	Pass												
Total ID/OD decarb	Pass												
This test report data is for the heat Chemistry Stated above.													

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

Janice Derossuff
Quality Assurance

me



PLYMOUTH TUBE CO. USA

1209 East 12th Street, Streator, Illinois 61364

Phone: (815) 673-1616 Fax: (815) 672-7343

TRUST YOUR SOURCE! ACCEPT NO SUBSTITUTIONS!



PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

136721 - 1 / 3

SHIP TO

TW Metals
235 Tubeway Drive
Carol Stream, IL 60188
USA

WORK ORDER 022125

HEAT NUMBER A160158

MELT SOURCE Steel Dynamics - USA Melt/Mfg

ISO 9001, 14001

AND

TS 16949

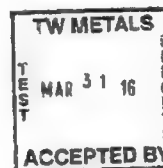
CERTIFIED

CUSTOMER P.O.	CUSTOMER PART	QUANTITY	LADING NO	CERT ID / REV	CERT DATE
M 49343812	33364	2,057.0 ft	00085022	02	03/30/2016

PART DESCRIPTION H10001200J000Z

The material in this test report is:

- 1) Drawn in the USA
- 2) Free from Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE), and Mercury contamination.
- 3) NAFTA compliant.



End of Certification

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

Jamie DeRossi
Quality Assurance



A COMPANY OF MUELLER INDUSTRIES

PRECISION TUBE CO.
287 WISSAHICKON AVE.
NORTH WALES PA 19454

Control No: 171191

CERTIFIED TEST REPORT

CUSTOMER PURCHASE ORDER NO.	CUST. ORD. NO.	PRECISION TUBE P/N
49342887 LINE 001	326178	24A031250580005

SOLD: TW METALS
TO 175 TUBEWAY
FOREST PARK, GA 30298
UNITED STATES

SHIP: TW METALS
TO 175 TUBEWAY
FOREST PARK, GA 30298
UNITED STATES

QUANTITY ORD.	DESCRIPTION	QTY. SHIPPED	DATE SHIPPED
2508 FT	METAL - 6061 ALUM TEMPER - T6 SPEC - AMS 4082P ASTM-B-210-12 AMS-WW-T-700/6B LENGTH - 12 FT LGTH TOL +.1250 IN -.0000 IN SHAPE - ROUND FINISH - STRAIGHT EXACT LENGTHS OD .3125 +.0030 -.0030 ID WALL .0580 +.0040 -.0040	2760 FT	01/06/16

MECHANICAL PROPERTIES

SAMPLE #	TENSILE STRENGTH (P.S.I.)	YIELD STRENGTH (P.S.I.)	ELONGATION IN 2 INCHES (%)	ROCKWELL HARDNESS	AVERAGE GRAIN SIZE (MM.)
1	44,899	38,733	15		

TEST REPORTS

DESTRUCTIVE TESTS

ACCEPTED BY

49342887
JAN 11 2016

Comments: FAR BAA COMPLIES, DFARS BAA COMPLIES, FAR TAA COMPLIES

TW METALS

NON-DESTRUCTIVE TESTS

EDDY CURRENT: PASS

CHEMICAL COMPOSITION

ALLOY: 6061		HEAT:		TRACEABILITY #: 35420776					
				RAW MATL VENDOR: PT55690 - Kaiser Aluminum					
	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al
Min	0.40		0.15		0.80	0.04			Rem.
Max	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	
OTHER ELEMENTS: 0.05 MAX EACH / 0.15 MAX TOTAL									

We hereby certify that the material has been manufactured and tested in accordance with the requirements of the applicable specifications and descriptions set forth on Precision Tube's sales acknowledgement. During the manufacturing, testing, and inspection, the product did not come into direct contact with mercury or any of its compounds, nor with any mercury containing device employing a single boundary containment. Test results indicate that the material is compliant with the current revision of the RoHS Directive (2011/65/EU).

Manufactured in the USA
QMS Registered to ISO 9001: 2008

By:
Art Onaitis
QA Manager

01/06/16
Page: 1 of 1

KAISER ALUMINUM FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

CUSTOMER PO NUMBER: PT55690		CUSTOMER PART NUMBER: SPIRIT-371850		PRODUCT DESCRIPTION: 5.400 LB/PC .500 LB/-0 LB 1.312 OD X .085 WALL ESRT	
KAISER ORDER NUMBER: 319478	LINE ITEM: 001	SHIP DATE: 11/13/2015	KAISER LOT NUMBER: 50751-310	ALLOY: 6061	TEMPER: O
WEIGHT SHIPPED: 5395.000 LB	QUANTITY: 983.000 PCS	B/L NUMBER: 004887	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 13.984 FT
SHIP TO: PRECISION TUBE CO 287 WISSAHICKON AVENUE N. WALES, PA 19454 USA			SOLD TO: MUELLER INDUSTRIES, INC PRECISION TUBE 8285 TOURNAMENT DRIVE STE. 150 MEMPHIS, TN 38125 USA		



Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	%Elong in 2	HARDNESS	CONDUCT.	BEND
50751-310	0001	0001	18.0	6.5	27.6	N/A	N/A	N/A
50751-310	0001	0002	17.6	5.9	27.6	NA N/A	N/A	N/A
50751-310	0001	0003	17.9	6.2	27.6	NA N/A	N/A	N/A
50751-310	0001	0004	17.9	5.9	26.8	NA N/A	N/A	N/A
50751-310	0001	0005	18.5	6.1	28.4	NA N/A	N/A	N/A
50751-310	0001	0006	18.1	6.0	28.7	NA N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	.0
F82353	.58	.32	.22	.05	1.02	.09	.05	.02	.00	.00	.00	.01	.02

Applicable Requirements:

ASTM-B241-12 NON-STENCILED ASTM-B221-13 ASTM-B345-11 AMS-QQ-A-200/8 97(R07) TYPE I
UNS#A96061 Also conforms to EN 10204 3.1

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY OF ITS COMPOUNDS ARE UTILITIZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.

TEST REPORTS
ACCEPTED BY
49342887
JAN 11 2018
[Signature]
TW METALS

Plant Serial: 00013139
Kaiser Order Number: 319478
Line Item: 001

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

JOSEPH AMES, QUALITY MANAGER

J. Ames

TEST REPORTS
ACCEPTED BY

JAN 11 2016

L. H.
TW METALS

KAISER ALUMINUM FABRICATED PRODUCTS

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CUSTOMER PO NUMBER: M49347943-1		CUSTOMER PART NUMBER: 42558		PRODUCT DESCRIPTION: Drawn Seamless Tube/Pipe	
KAISER ORDER NUMBER: 220181	LINE ITEM: 001	SHIP DATE: 04/30/2016	KAISER LOT NUMBER: F00212761	ALLOY: 6061	TEMPER: T6
WEIGHT SHIPPED: 504.000 LB	QUANTITY: 313.000 PCS	B/L NUMBER: 221672	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 12.000 FT
SHIP TO: TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA			SOLD TO: TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA		

Actual Physical Properties

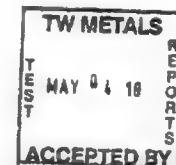
REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00212761	0001	1	46.1	39.7	17.5	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D75640	.58	.30	.21	.05	.93	.09	.06	.02	.00	.00	.00	.01	.02

Applicable Requirements:

Description: OD: 0.6250"; Wall: 0.0650"; Round @
AMS-4082P AMS-WW-T-700/6C ASTM B210-12 WW-T-700/6F
WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS-4082P, WAS NOT OILED.
This Product Complies to FAR BAA, DFARS BAA, FAR TAA
COMPLIES TO DIN EN 10204 JAN 2005
No Weld Repair. Mercury Free.



Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA
(DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5
TRADE AGREEMENTS).

Plant Serial: 00021973
Kaiser Order Number: 220181
Line Item: 001

MB

KAISER

ALUMINUM

FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

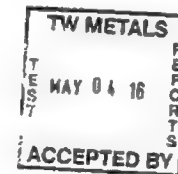
CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Hans Kattentidt, Quality Manager



MATERIAL RECEIPT INSPECTION FORM

MATERIAL H304TR.750W.049
DATE 16/06/28

PO / BATCH NO 32748/135093

MATERIAL CERT REC'D yes
QUANTITY RECEIVED 40'
QUANTITY INSPECTED 40'
QUANTITY REJECTED _____

THICKNESS ORDERED .750 X .049W
THICKNESS RECEIVED .746 X .047W
SHEET SIZE ORDERED _____
SHEET SIZE RECEIVED _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK RECORD RESULTS BELOW			
	HRC	HRB	DUR A
TYPE OF MATERIAL			
SIZE OF TEST SAMPLE			
HARDNESS / DUROMETER READING			

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY <u>DAS</u>	SIGNED OFF BY _____		
DATE <u>16/06/28</u>	DATE _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL 114130NT.0750W.049
DATE 16/06/28

PO / BATCH NO 32748/135093

MATERIAL CERT REC'D yes
QUANTITY RECEIVED 38'
QUANTITY INSPECTED 38'
QUANTITY REJECTED _____

THICKNESS ORDERED 750X.049W
THICKNESS RECEIVED 750 X.048W
SHEET SIZE ORDERED _____
SHEET SIZE RECEIVED _____

DESCRIPTION	NCR (Check Y,N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK
RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION **ENGINEERING SIGNOFF (if required)**

INSPECTED BY DMS SIGNED OFF BY _____
DATE 16/06/28 DATE _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL M4130NT 1.00X.120
DATE 16/06/28

PO / BATCH NO 32748/135093

MATERIAL CERT REQD yes
QUANTITY RECEIVED 23'
QUANTITY INSPECTED 23'
QUANTITY REJECTED _____

THICKNESS ORDERED 1.00X.120W
THICKNESS RECEIVED 1.00X.118W
SHEET SIZE ORDERED _____
SHEET SIZE RECEIVED _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

CLIP SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK				
RECORD RESULTS BELOW				
	HRC	HRB	DUR A	DUR D
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY _____	DAS 14	SIGNED OFF BY _____	
DATE <u>16/06/28</u>	9/89	DATE _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL M606/T6T, 3125W.058
DATE 16/06/28

PO : BATCH NO 32748/135093

MATERIAL CERT REQD yes
QUANTITY RECEIVED 60'
QUANTITY INSPECTED 60'
QUANTITY REJECTED _____

THICKNESS ORDERED .3125 X .058W
THICKNESS RECEIVED .312 X .053W
SHEET SIZE ORDERED _____
SHEET SIZE RECEIVED _____

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORROSION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT MATERIAL	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT THICKNESS	Y <input checked="" type="radio"/> N <input type="radio"/>	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT MATERIAL	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT MARK ON THE MATERIAL	Y <input checked="" type="radio"/> N <input type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK
RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION

INSPECTED BY _____

DAS
14

SIGNED OFF BY _____

DATE

16/06/28

DATE

ENGINEERING SIGNOFF (if required)

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL M6D4IT6T.500X.058
 DATE 16/06/28

PO / BATCH NO 32748/135093

MATERIAL CERTIFIED YLS
 QUANTITY RECEIVED 48
 QUANTITY INSPECTED 48
 QUANTITY REJECTED _____

THICKNESS ORDERED 500 X .058 W
 THICKNESS RECEIVED 500 X .054 W
 SHEET SIZE ORDERED _____
 SHEET SIZE RECEIVED _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y	N	
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT MATERIAL	<input checked="" type="radio"/> Y	N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK
 RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

Testers located in the Quality Office

ENGINEERING SIGNOFF (if required)

QC 18 INSPECTION

INSPECTED BY DAS
14
 DATE 16/06/28

SIGNED OFF BY _____
 DATE _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL M6061 T6 625 W.065
DATE 16/06/28

PO / BATCH NO 32748/135093

MATERIAL CERTIFIED yes
QUANTITY RECEIVED 48'
QUANTITY INSPECTED 48'
QUANTITY REJECTED _____

THICKNESS ORDERED .625 W.065
THICKNESS RECEIVED .625 X.062 W
SHEET SIZE ORDERED _____
SHEET SIZE RECEIVED _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK RECORD RESULTS BELOW				
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY	<u>14</u>	SIGNED OFF BY	
DATE	<u>16/06/28</u>	DATE	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO32748

Purchase Order Date 6/17/2016

PO Print Date 6/17/2016

Page Number 1 of 4

Order From :

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

VU-TWM001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

JUN 17 2016

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via: YRC COLLECT

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable CD Promise Date	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	M304TR0.750W.049	304 RD Tube .750 x .049W	6/23/2016 Yes 6/23/2016	40.00 f	\$2.10	\$84.00
MATERIAL: AISI 304/316 SA SEAMLESS ROUND TUBING AS PER ASTM A213 OR AMSE SA213 OR ASTM A269						
Line Total:						\$84.00
2	M4130NT0.750W.049	4130 RD Tube .750 x.049W	6/23/2016 Yes 6/23/2016	40.00 f	\$2.75	\$110.00
MATERIAL: AISI 4130N SEAMLESS STEEL TUBING AS PER MIL-T-6736 OR AMS 6371/6360/6361 6362/6373/6374						
Line Total:						\$110.00

Sp 16-6-27

Note:

6/17/2016



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Page Number 2 of 4

Order From :
TW METALS
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ALTANTA, GA 31193-3014
US

VU-TWM001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via: YRC COLLECT

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

3	M4130NT1.000W.120	4130 RD Tube 1.00 x .120wall	6/23/2016	20.00		\$6.00	\$120.00
			Yes				
			6/23/2016				

MATERIAL: AISI 4130N SEAMLESS STEEL TUBING
AS PER MIL-T-6736 OR AMS 6371/6360/6361
6362/6373/6374

rec'd 23 F ✓
SP/6-6-27

Line Total: \$120.00

4	M6061T6T0.3125W.058	ALUM TUBE .3125 x .058w	6/23/2016	60.00		\$2.50	\$150.00
			Yes				
			6/23/2016				

MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING
AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR
AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR
ASTM B241

SP/6-6-27

Line Total: \$150.00

Note:

6/17/2016



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PURCHASE ORDER

Purchase Order ID **PO32748**

Purchase Order Date 6/17/2016

PO Print Date 6/17/2016

Page Number 3 of 4

Order From :
TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

VU-TWM001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 585 768 5600

Ship To Contact
Ship To Phone
Ship Via: YRC COLLECT
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency USD
FOB FCA - (Free Carrier)

5	M6061T6T0.500W.058	6061-T6 RD Tube .500 x.058W	6/23/2016	40.00	\$1.75	\$70.00
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Yes
6/23/2016

MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING
AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR
AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR
ASTM B241

f
rec'd 4/8 F
Sp/6-6-27.

Line Total: \$70.00

6	M6061T6T0.625W.065	6061-T6 RD Tube .625 x.065W	6/23/2016	40.00	\$3.15	\$126.00
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Yes
6/23/2016

MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING
AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR
AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR
ASTM B241

f
4/8 F
Sp/6-6-27.

Line Total: \$126.00

Note:

6/17/2016



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Page Number 4 of 4

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Contact Name
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Ship To Phone
Ship Via: YRC COLLECT
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency USD
FOB FCA - (Free Carrier)

7	71401-45	procurement quality clauses	6/23/2016	1.00	✓	\$0.00	\$0.00
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No

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

6/23/2016

5/16/16-27

Line Total: \$0.00

PO Total: \$660.00

CL

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 6/17/2016